

67,036-041; B05850-AT1

IN THE CLAIMS

1. (Currently Amended) A dual-inlet gear pump comprising:
a drive gear associated with a drive shaft to be driven, said drive gear having gear teeth engaging gear teeth on a second driven gear; and
a first inlet for delivering a fluid to be pumped to said drive gear, and a second inlet, separate from said first inlet, for delivering a fluid to be pumped to said driven gear, said first inlet to be communicated to a first source of fluid, and said second inlet to be communicated to a second source of fluid, said first source of fluid having a higher ~~expected~~ flow rate than said second source.
2. (Original) A dual-inlet gear pump as set forth in Claim 1, wherein the dual-inlet gear pump is part of an oil scavenging system for a jet engine, and said first and second sources of fluid provide an air/oil mixture to said first and second inlets.
3. (Original) A dual-inlet gear pump as set forth in claim 1, wherein consecutive teeth of said driven gear sealing on a housing surface as said teeth approach a port for communicating with said second inlet, said surface being sufficiently long such that adjacent ones of said teeth seal on said surface for at least a period of time as they approach said port.

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4. (Original) A dual-inlet gear pump as set forth in claim 1, wherein said dual-inlet gear pump is part of an oil scavenging system for a gearbox, and said first and second sources of fluid provide an air/oil mixture to said first and second inlets from distinct gearbox locations.

5. (Original) A dual-inlet gear pump as set forth in claim 4, wherein said distinct gearbox locations are two distinct gearboxes.

6. (Currently Amended) A method of providing a gear pump comprising the steps of:

(1) providing a drive gear attached to a source of drive, said drive gear being provided with teeth at an outer periphery, said teeth on said drive gear engaging mating teeth on a driven gear such that rotation of said drive gear causes rotation of said driven gear;

(2) providing a first inlet for providing a fluid to said drive gear and a separate second inlet for providing a fluid to said driven gear; and

(3) connecting said first and second inlets to a first and second source of fluid, respectively, said first source of fluid having a higher ~~expected~~ flow rate than said second source of fluid.

7. (Original) A method as set forth in claim 6, wherein said first and second sources of fluid are components on a jet engine.

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8. (Original) A method as set forth in claim 6, wherein said first and second sources of fluid deliver an air/oil mixture.

9. (Currently Amended) A lubricant scavenging system for a jet engine comprising:

a dual-inlet gear pump including a drive gear being driven to rotate by a jet engine drive, said drive gear having teeth at an outer periphery engaging teeth on a driven gear such that rotation of said drive gear causes rotation of said driven gear;

a first fluid supply communicating with a first component on the jet engine and a second fluid supply communicating with a second component on the jet engine; and

a first inlet communicating said first fluid supply to said drive gear and a second inlet communicating said second fluid supply to said driven gear, said first and second inlets being separate from each other, and said first component having a higher expected flow rate than said second component.

10. (Original) A dual-inlet gear pump as set forth in claim 9, wherein consecutive teeth of said driven gear sealing on a housing surface as said teeth approach a port for communicating with said second inlet, said surface being sufficiently long such that adjacent ones of said teeth seal on said surface for at least a period of time as they approach said port.

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11. (New) A dual-inlet gear pump as set forth in claim 1, wherein said first source of fluid is delivered to an inlet of said drive gear through said first inlet, and said second source of fluid is delivered to an inlet of said driven gear through said second inlet.

12. (New) A system as set forth in claim 9, wherein said first source of fluid is delivered to an inlet of said drive gear through said first inlet, and said second source of fluid is delivered to an inlet of said driven gear through said second inlet.

13. (New) A method as set forth in claim 6, wherein said first and second sources of fluid are delivered directly to an inlet of a respective one of said drive and driven gears.